



## PRODUCT GUIDE

Lighter, with much greater stiffness. Vastly reduces costs.

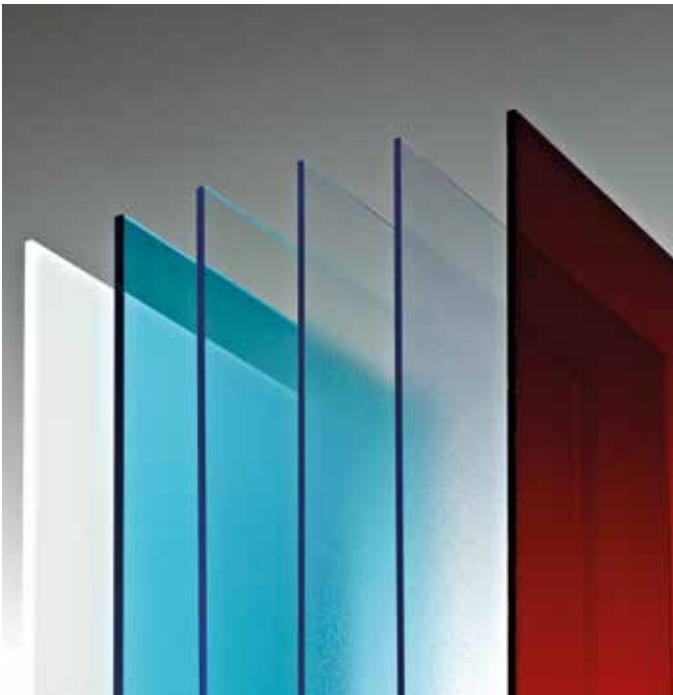




## **POLYCASA® SAN IS A SHEET MATERIAL WHICH OFFERS MANY UNUSUAL FEATURES OVER CONVENTIONAL CLEAR SHEETS.**

A weight reduction of 10%, combined with a much higher stiffness value, means that you could use a sheet up to a third thinner than normal, vastly reducing your material cost budget. It also offers outstanding resistance to both moisture and chemical absorption – making POLYCASA® SAN easier to maintain, and, with the UVP+ version, perfect for applications like greenhouse glazing.

With light weight and UV resistance properties, POLYCASA® SAN is the perfect choice for industrial door glazing, showing big savings on energy costs where electric motors are used to control the door opening.



### **PRODUCT IDENTIFICATION**

POLYCASA® SAN is the trade name for extruded Styrene Acrylonitrile (SAN) copolymer sheets from Polycasa.

The POLYCASA® SAN programme offers solutions to both indoor and outdoor applications. (For external use, POLYCASA® SAN UVP, incorporating UV protection should be used.)

As a result of the extrusion and lamination process, Polycasa can offer a variety of designs, as well as the glass clear version.

The almost unlimited application possibilities of POLYCASA® SAN offer the industry new opportunities in order to stimulate creativity.

### **CHARACTERISTICS**

- Good optical properties and a brilliant surface.
- Easy to handle and vacuum form.
- Show a very good dimensional stability.
- Very good chemical resistance: to most fats, dilute acid solutions, oils and common bleaching agents, as well as some solvents and weak alkaline solutions.
- Can be used in - and outdoor (in UVP version) and are resistant to temperature fluctuations.
- Can be used in contact with foodstuffs (non UV version).

### **APPLICATIONS**

- Industrial (door) glazing.
- Covers for foodstuffs.
- Covers for office equipment.
- Screen printing.
- Advertising signs.
- Fittings for shops and exhibitions.
- Displays.
- Flat or curved shower screens.
- Greenhouse glazing.
- Room dividers.

### **PRODUCT RANGE**

- Available in crystal clear or opal finish.
- Special colours: black, white, smoke grey and warm bronze, available upon request, subject to conditions.
- Standard thicknesses range from 1.5 to 6 mm.
- Patterned and prismatic sheets are also available, subject to special conditions.

Please contact your local customer service centre for a complete product overview. For details see back of brochure.

## TECHNICAL INFORMATION

GENERAL			
Property	Method	Unit	POLYCASA® SAN
Density	ISO 1183	g/cm <sup>3</sup>	1.08
Rockwell hardness	ISO 2039-2	M scale	83
OPTICAL			
Property	Method	Unit	POLYCASA® SAN
Light transmission	DIN 5036-3	%	86
Refractive index	ISO 489		1.57
MECHANICAL			
Property	Method	Unit	POLYCASA® SAN
Flexural modulus	ISO 178	MPa	3750
Flexural strength	ISO 178	MPa	105
Tensile modulus	ISO 527-2	MPa	3900
Tensile strength	ISO 527-2	MPa	60
Elongation	ISO 527-2	%	1.8
THERMAL			
Property	Method	Unit	POLYCASA® SAN
Vicat temperature (B)	ISO 306	°C	106
Heat deflection temperature (A/B)	ISO 75	°C	98/101
Specific heat capacity	ASTM D-2766	J/gK	1.38
Coefficient of linear thermal expansion	DIN 53752	K <sup>-1</sup> x10 <sup>-5</sup>	5-7
Thermal conductivity	DIN 52612	W/mK	0.17
Degradation temperature		°C	>280
Max. service temperature		°C	85
Sheet forming temperature range		°C	165-190
IMPACT STRENGTHS			
Property	Method	Unit	POLYCASA® SAN
Izod (notched)	ISO 180	KJ/m <sup>2</sup>	1.3
Charpy (unnotched)	ISO 179-1	KJ/m <sup>2</sup>	13
ELECTRICAL			
Property	Method	Unit	POLYCASA® SAN
Volume resistivity	IEC 6093	Ω.cm	10 <sup>14</sup>
Surface resistivity	IEC 6093	Ω	>10 <sup>15</sup>

Note: All mentioned data is based on extruded sheets in a thickness of 4mm.

The technical data of our products are typical ones; the actually measured values are subject to production variations.





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